

Issuance Date: April 1, 1998

Effective Date: May 1, 1998

Expiration Date: April 1, 2003

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM  
WASTE DISCHARGE PERMIT No. WA-000029-9

State of Washington  
DEPARTMENT OF ECOLOGY  
Olympia, Washington 98504-8711

In compliance with the provisions of  
The State of Washington Water Pollution Control Law  
Chapter 90.48 Revised Code of Washington  
And  
The Federal Water Pollution Control Act  
(The Clean Water Act)  
Title 33 United States Code, Section 1251 et seq.

Vanalco, Inc.  
P.O. Box 9805  
Vancouver, WA 98666

<u>Facility Location:</u> 5701 NW Lower River Road Vancouver, WA	<u>Receiving Water</u> Columbia River @ River Mile 103
<u>Water Body I.D. No.:</u> WA-CR-1010	<u>Discharge Locations- Outfall 001:</u> Latitude: 45° 38' 58" N Longitude: 122° 44' 41" W
<u>IndustryType:</u> Primary Aluminum Smelter	<u>Outfall 002:</u> Latitude: 45° 38' 31" N Longitude: 122° 43' 29" W

is authorized to discharge in accordance with the special and general conditions which follow.

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M.F. Palko, Supervisor  
Industrial Section  
Washington State Department of Ecology

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### SUMMARY OF PERMIT REPORT SUBMITTALS

Permit Section	Submittal	Frequency	First Submittal Date
S3	Discharge Monitoring Report	Monthly	June 15, 1998
S3.I.3	Notice of Change in Authorization	As necessary	
S4.C.	Modification to Solid Waste Control Plan	As necessary	
S4.C.	Updated Solid Waste Control Plan	1/permit cycle	November 1, 2002
S5	Acute Toxicity Testing	Twice in final year of cycle	
S6.B.	Chronic Toxicity Compliance Monitoring Reports	Quarterly	September 30, 1998
S7	Outfall Evaluation	1/permit cycle	November 1, 2002
S8	Treatment System Operating Plan	1/permit cycle	November 1, 1999
S9	Spill Plan	1/permit cycle; updates as necessary	November 1, 1999
S10	Submit stormwater pollution prevention plan (SWPPP)	1/permit cycle	August 1, 1998
S10	Complete non-capital BMP's		February 1, 1999
S10	Complete capital BMP's		November 1, 1999
S10	Updates to SWPPP	as necessary	
G17	Application for permit renewal	1/permit cycle	November 1, 2002

## SPECIAL CONDITIONS

### S1. EFFLUENT LIMITATIONS

#### A. Process Wastewater Discharges

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge process wastewater and stormwater at the permitted location subject to meeting the following limitations:

	EFFLUENT LIMITATIONS <sup>a</sup> : OUTFALL # 001	
Parameter	Average Monthly <sup>a</sup>	Maximum Daily <sup>b</sup>
Fluoride	70.0 lb/day	154 lb/day
Aluminum	14.0 lb/day	40.0 lb/day
Oil & Grease	41.0 lb/day	93.0 lb/day
TSS	172 lb/day	383 lb/day
pH <sup>c</sup>	Daily minimum is equal to or greater than 6 and the daily maximum is less than or equal to 9.	
<sup>a</sup> The average monthly effluent limitation is defined as the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.		
<sup>b</sup> The maximum daily effluent limitation is defined as the highest allowable daily discharge.		
<sup>c</sup> Indicates the range of permitted values. When pH is continuously monitored, excursions between 5.0 and 6.0 , or 9.0 and 10.0 shall not be considered violations provided no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month. Any excursions below 5.0 and above 10.0 are violations. The instantaneous maximum and minimum pH shall be reported monthly.		

#### B. Mixing Zone Descriptions

The maximum boundaries of the mixing zone for Outfall 001 is defined as follows:

Chronic Mixing Zone: The length of the chronic mixing zone shall extend in a downstream direction from the discharge port for three hundred (300) feet plus the depth of the diffuser, which is thirty-five (35) feet for a total of three hundred and thirty five (335) feet. The chronic mixing zone shall extend upstream a distance of one hundred (100) feet. The width of the chronic mixing zone shall be the length of the diffuser, zero (0) feet, plus fifty (50) feet on each side of the diffuser for a total of one hundred feet. The dilution ratio at the edge of this chronic zone has been calculated to be 70 to 1 (70:1).

Acute Mixing Zone: The acute mixing zone is ten percent (10%) of the chronic zone as previously defined. This zone shall be thirty-three (33) feet in any spatial direction from the outfall. The dilution ratio for the acute zone has been calculated to be 4 to 1 (4:1).

C. Sanitary Treatment System Discharge

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following pollutants more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

Beginning on the effective date of this permit and lasting through the expiration date the Permittee is authorized to discharge municipal wastewater at Outfall 002 subject to the following limitations:

	<b>EFFLUENT LIMITATIONS<sup>a</sup>: OUTFALL # 002</b>	
<b>Parameter</b>	<b>Monthly Average<sup>a</sup></b>	<b>Maximum</b>
BOD <sup>b</sup> (5 day)	25 mg/L	45 mg/L
Total Suspended Solids <sup>b</sup>	30 mg/L	45 mg/L
Fecal Coliform Bacteria	200 /100 mL	400 /100 mL
pH <sup>c</sup>	Daily minimum is $\geq$ 6 and daily max. is $\leq$ 9.	
Total Residual Chlorine	-	1.0 mg/L <sup>d</sup>
<sup>a</sup> The average monthly and weekly effluent limitations are based on the arithmetic mean of the samples taken with the exception of fecal coliform, which is based on the geometric mean.		
<sup>b</sup> In addition to the concentration limit, the average monthly effluent concentration for Biochemical Oxygen Demand and Total Suspended Solids shall not exceed 35 percent of the respective monthly average influent concentrations.		
<sup>c</sup> Indicates the range of permitted values. When pH is continuously monitored, excursions between 5.0 and 6.0 , or 9.0 and 10.0 shall not be considered violations provided no single excursion exceeds 60 minutes in length and total excursions do not exceed 7 hours and 30 minutes per month. Any excursions below 5.0 and above 10.0 are violations. The instantaneous maximum and minimum pH shall be reported monthly.		
<sup>d</sup> <b>A maximum of 1.0 mg/L of combined residual chlorine is allowed in the final outfall after dechlorination. In addition, a minimum of 0.5 mg/L is required before dechlorination.</b>		

## S2. MONITORING SCHEDULE

### A. Outfall 001

The Permittee shall monitor the wastewater at Outfall 001 according to the following schedule:

Parameter	Units	Sample Point	Min. Sampling Frequency	Sample Type
Flow	MGD	outfall station	continuous <sup>d</sup>	meter
Fluoride	mg/l	outfall station	Daily <sup>a</sup>	24 hr. composite <sup>b</sup>
Aluminum	mg/l	outfall station	Daily <sup>a</sup>	24 hr. composite <sup>b</sup>
TSS	#/100 mL	outfall station	Daily <sup>a</sup>	24 hr. composite <sup>b</sup>
Oil & Grease	mg/L	outfall station	Daily <sup>a</sup>	grab
Chronic Toxicity	minimum % effluent	outfall station	1/quarter	24 hr. composite <sup>b</sup>
Cyanide <sup>e</sup>	mg/L	outfall station	1/week	24 hr. composite <sup>b</sup>
pH	Std. Units	outfall station	continuous <sup>d</sup>	continuous
Temperature	<sup>0</sup> F.	outfall station	continuous <sup>d</sup>	continuous
Production <sup>c</sup> :				
Aluminum	Metal,	tons per day		Daily Average
Anode	Production,	tons per day		Daily Average
Direct Chill	Casting,	tons per day		Daily Average

<sup>a</sup> Daily sampling frequency is defined as one 24 hour composite sample per day, seven days per week.

<sup>b</sup> A 24 hour composite sample is defined as a 24 hour flow proportional composite sample.

<sup>c</sup> Production daily average is defined as the total calendar monthly production divided by the actual production days during that month.

<sup>d</sup> **“Continuous” monitoring of these parameters shall not include periods of downtime due to unanticipated and uncontrollable power interruptions and equipment malfunctions, and routine maintenance. All down time for these parameters shall be reviewed by Ecology and approved or disapproved.**

<sup>e</sup> The method for free cyanide analysis shall be Weak Acid Dissociable Cyanide, Method 4500-CN I, Standard Methods for the Examination of Water and Wastewater, 19th Edition.

B. Outfall 002

The permittee shall monitor the wastewater at Outfall 002 according to the following schedule:

Category	Parameter	Units	Sample Point	Min. Sampling Frequency	Sample Type
Wastewater Influent	BOD <sub>5</sub>	mg/l	Influent	1/week	24 hr. composite <sup>a</sup>
“	TSS	mg/l	Influent	1/week	24 hr. composite <sup>a</sup>
Wastewater Effluent	Flow	MGD	effluent weir	continuous <sup>b</sup>	continuous
“	BOD <sub>5</sub>	mg/l	final effluent	2/week	24 hr. composite <sup>a</sup>
“	TSS	mg/l	final effluent	Daily	24 hr. composite <sup>a</sup>
“	Fecal Coliform	# / 100 mL	final effluent	1/week	grab
“	Chlorine	mg/L	final effluent <sup>c</sup>	Daily	grab
“	pH	Std. Unit	final effluent	1/week	grab

<sup>a</sup> A 24 hr composite sample is defined as a 24 hour flow proportional composite sample.

<sup>b</sup> **“Continuous” monitoring of flow shall not include periods of downtime due to unanticipated and uncontrollable power interruptions and equipment malfunctions, and routine maintenance. All downtime shall be reviewed by Ecology and approved or disapproved.**

<sup>c</sup> **Chlorine** residual shall be measured before and after dechlorination.

**S3. MONITORING AND REPORTING**

The Permittee shall monitor and report in accordance with the following conditions.

A. Reporting

Monitoring results obtained during a calendar month shall be summarized and reported on Discharge Monitoring Report (DMR) Form (EPA 3320-1) or another form approved by the Department. In addition, a summary sheet of daily results for the monitored parameters listed in section S2, with MDLs, and QLs (when

applicable), shall also be submitted. The monthly report shall be submitted no later than the 15th day of the month following the completed reporting period.

The report shall be sent to the Department of Ecology, Industrial Section, P. O. Box 47706, Olympia, Washington 98504-7706. Monitoring shall be started on the effective date of the permit and the first report is due on the 15th day of the following month.

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Representative Sampling

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored discharge. This includes representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

A minimum of 4-8 liters of daily composited sample shall be retained until noon each day, and shall be made available to the Department for wastewater inspections. All composited samples shall be kept refrigerated at 4° C. in the dark.

E. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall conform to the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136, unless otherwise specified in this permit or approved in writing by the Department.

F. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations or at a minimum frequency of at least one calibration per year. Calibration records should be maintained for a minimum of three years. Downtime for calibration checks shall not be considered a violation of continuous monitoring requirements.

G. Laboratory Accreditation

All monitoring data, except for flow, temperature, pH, and internal process control parameters, shall be prepared by a laboratory registered or accredited under the provisions of, Accreditation of Environmental Laboratories, chapter 173-50 WAC. Analyses of pH shall be accredited if the laboratory must otherwise be registered or accredited. Soils and hazardous waste data are exempted from this requirement pending accreditation of laboratories for analysis of these media by the Department.

H. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit (S2.) using test procedures specified by Condition S3.E. of this permit, then the results of this monitoring shall be included in calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

I. Signatory Requirements

All applications, reports, or information submitted to the Department shall be signed and certified.

1. All permit applications shall be signed by either a principal executive officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.
2. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described above and submitted to the Department, and

- b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. A duly authorized representative may thus be either a named individual or any individual occupying a named position.
3. Changes to authorization. If an authorization under paragraph I.2.b is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of I.2.b must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations."

#### **S4. SOLID WASTE DISPOSAL**

##### **A. Solid Waste Handling**

The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

##### **B. Leachate**

The Permittee shall not allow leachate from its solid waste material to enter state waters without providing all known, available and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, chapter 173-201A WAC, or the State Ground Water Quality Standards, chapter 173-200 WAC. The Permittee shall apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

C. Solid Waste Control Plan

The Permittee shall submit all proposed revisions or modifications to the solid waste control plan to the Department. The Permittee shall comply with any plan modifications. The Permittee shall submit an update of the solid waste control plan with the application for permit renewal 180 days prior to the expiration date of the permit.

**S5. ACUTE TOXICITY**

A. Testing Requirements

The Permittee shall test final effluent once in the last summer (2002) and once in the last winter (2001-2002) prior to submission of the application for permit renewal. The two species listed below shall be used on each sample and the results submitted to the Department as a part of the permit renewal application process. The Permittee shall conduct acute toxicity testing on a series of five concentrations of effluent and a control in order to be able to determine appropriate point estimates and a NOEC. The percent survival in 100% effluent shall also be reported.

Acute toxicity tests shall be conducted with the following species and protocols:

- 1) Fathead minnow- *Pimephales promelas* -96 hour static-renewal test, method: EPA/600/4-90/027F.
- 2) Daphnid- *Ceriodaphnia dubia*, *Daphnia pulex*, or *Daphnia magna* -48 hour static test, method: EPA/600/4-90/027F.

B. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.
2. Testing shall be conducted on 24-hour composite effluent samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.

3. Permittees that potentially have ammonia and/or chlorine in the effluent shall measure total ammonia and/or chlorine from a sample collected for toxicity testing. All samples taken for toxicity testing shall have pH, total alkalinity, total hardness, dissolved oxygen, and conductivity or salinity measured prior to test initiation.
4. All toxicity tests shall meet quality assurance criteria in the most recent versions of the EPA manual listed in subsection A. and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent. If control performance does not meet protocol standards for acceptability, the test shall be repeated with freshly collected effluent.
5. Control water and dilution water shall be laboratory water or pristine natural water meeting the requirements of the EPA manual listed in subsection A. Dilution water for toxicity testing shall be of sufficient quality for good control performance.
6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.
7. The dilution series must include the acute critical effluent concentration (ACEC). The ACEC is 20% effluent.
8. All whole effluent toxicity tests that involve hypothesis testing and do not comply with the acute statistical power standard of 29% as defined in WAC 173-205-020 must be repeated on a fresh sample with an increased number of replicates to increase the power.

## **S6. CHRONIC TOXICITY**

### **A. Effluent Limit for Chronic Toxicity**

**The effluent limit for chronic toxicity is no toxicity detected in a 1.4% effluent concentration.**

The 1.4% effluent concentration is the chronic critical effluent concentration (CCEC) which is the maximum concentration of effluent at the boundary of the mixing zone at critical conditions, as assigned in Section 1 pursuant to WAC 173-201A-100.

In the event of failure to pass the test described in subsection B. of this section for compliance with the effluent limit for chronic toxicity, the Permittee is considered to be in compliance with all permit requirements for chronic whole effluent toxicity as long as the requirements in subsection C. are being met to the satisfaction of the Department.

B. Monitoring for Compliance With an Effluent Limit for Chronic Toxicity

The Permittee shall conduct monitoring to determine compliance with the effluent limit for chronic toxicity. The chronic toxicity tests shall be performed using a 1.4% dilution (the CCEC), a 20% dilution (the ACEC), and a control. Chronic toxicity testing shall follow protocols, monitoring requirements, and quality assurance/quality control procedures specified in this Section. Testing shall begin within 60 days of the permit effective date. A written report shall be submitted to the Department within 60 days after each of the test results are final. This written report shall contain the results of hypothesis testing conducted as described in this subsection using both the ACEC and CCEC versus the control.

Monitoring to determine compliance with the effluent limit shall be conducted quarterly using the following species and the most recent version of the following protocols on a rotating basis:

Freshwater Chronic Toxicity Test Species		Method
Fathead minnow	<i>Pimephales promelas</i>	EPA/600/4-91/002
Water flea	<i>Ceriodaphnia dubia</i>	EPA/600/4-91/002
Alga	<i>Selenastrum capricornutum</i>	EPA/600/4-91/002

The Permittee is in violation of the effluent limit for chronic toxicity in subsection A. and shall immediately implement subsection C. if any chronic toxicity test conducted for compliance monitoring determines a statistically significant difference in response between the control and the CCEC using hypothesis testing at the 0.05 level of significance (Appendix H, EPA/600/4-89/001). If the difference in response between the control and the CCEC is less than 20%, the hypothesis test shall be conducted at the 0.01 level of significance.

In order to establish whether the chronic toxicity limit is eligible for removal from future permits, the Permittee shall also conduct this same hypothesis test (Appendix H, EPA/600/4-89/001) to determine if a statistically significant difference in response exists between the ACEC and the control.

C. Response to Noncompliance With an Effluent Limit for Chronic Toxicity

If a toxicity test conducted for compliance monitoring under subsection B. determines a statistically significant difference in response between the CCEC and the control, the Permittee shall begin additional compliance monitoring within one week from the time the test results are received. This additional monitoring shall be conducted once per month for three consecutive months using the same test and species as the failed compliance test. Testing shall be conducted using a series of at least five effluent concentrations and a control in order to be able to determine appropriate point estimates. One of these effluent concentrations shall be 1.4% effluent (the CCEC) and shall be compared statistically to the nontoxic control in order to determine compliance with the effluent limit for chronic toxicity as described in subsection B. The discharger shall return to the original monitoring frequency in subsection B. after completion of the additional compliance monitoring.

If the Permittee believes that a test indicating noncompliance will be identified by the Department as an anomalous test result, the Permittee may notify the Department that the compliance test result might be anomalous and that the Permittee intends to take only one additional sample for toxicity testing and wait for notification from the Department before completing the additional monitoring required in this subsection. The notification to the Department shall accompany the report of the compliance test result and identify the reason for considering the compliance test result to be anomalous. The Permittee shall complete all of the additional monitoring required in this subsection as soon as possible after notification by the Department that the compliance test result was not anomalous. If the one additional sample fails to comply with the effluent limit for chronic toxicity, then the Permittee shall proceed without delay to complete all of the additional monitoring required in this subsection. The one additional test result shall replace the compliance test result upon determination by the Department that the compliance test result was anomalous.

If all of the additional compliance monitoring conducted in accordance with this subsection complies with the permit limit, the Permittee shall search all pertinent and recent facility records (operating records, monitoring results, inspection records, spill reports, weather records, production records, raw material purchases, pretreatment records, etc.) and submit a report to the Department on possible causes and preventive measures for the transient toxicity event which triggered the additional compliance monitoring.

If toxicity occurs in violation of the chronic toxicity limit during the additional compliance monitoring, the Permittee shall submit a Toxicity Identification/Reduction Evaluation (TI/RE) plan to the Department within 60 days after test results are final. The TI/RE plan shall be based on WAC 173-205-100(2). The TI/RE plan shall address areas where adequate guidance, procedures, or protocols are not available for implementation of the plan.

The Permittee shall submit a revised TI/RE plan in accordance with Department comments, within 30 days after receipt of the Department's comments. The Department will issue an administrative order to require implementation of the TI/RE in accordance with WAC 173-205-100(3).

D. Sampling and Reporting Requirements

1. All reports for effluent characterization or compliance monitoring shall be submitted in accordance with the most recent version of Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria* in regards to format and content. Reports shall contain bench sheets and reference toxicant results for test methods. If the lab provides the toxicity test data on floppy disk for electronic entry into the Department's database, then the Permittee shall send the disk to the Department along with the test report, bench sheets, and reference toxicant results.
2. Testing shall be conducted on 24-hour composite effluent samples. Samples taken for toxicity testing shall be cooled to 4 degrees Celsius while being collected and shall be sent to the lab immediately upon completion. The lab shall begin the toxicity testing as soon as possible but no later than 36 hours after sampling was ended.
3. Permittees that potentially have ammonia and/or chlorine in the effluent shall measure total ammonia and/or chlorine from a sample collected for toxicity testing. All samples taken for toxicity testing shall have pH, total alkalinity, total hardness, dissolved oxygen, and conductivity or salinity measured prior to test initiation.
4. All toxicity tests shall meet quality assurance criteria in the most recent versions of the EPA manual or other test method listed in subsection B. and the Department of Ecology Publication # WQ-R-95-80, *Laboratory Guidance and Whole Effluent Toxicity Test Review Criteria*. If test results are determined to be invalid or anomalous by the Department, testing shall be repeated with freshly collected effluent. If control performance does not meet protocol standards for acceptability, the test shall be repeated with freshly collected effluent.
5. Control water and dilution water shall be laboratory water or pristine natural water meeting the requirements of the EPA manual listed in subsection B. Dilution water for toxicity testing shall be of sufficient quality for good control performance.
6. The whole effluent toxicity tests shall be run on an unmodified sample of final effluent.

7. The Permittee may choose to conduct a full dilution series test during compliance monitoring in order to determine dose response. In this case, the series must have a minimum of five effluent concentrations and a control. The series of concentrations must include a 1.4% effluent concentration (the CCEC) and a 20% effluent concentration (the ACEC). The CCEC and the ACEC may either substitute for the effluent concentration that is closest to it in the dilution series or be an extra effluent concentration.
8. If a whole effluent toxicity test involves hypothesis testing and does not comply with the chronic statistical power standard of 39% as defined in WAC 173-205-020, the testing must be repeated on a fresh sample with an increased number of replicates to increase the power.

## **S7. OUTFALL EVALUATION**

The Permittee shall inspect the submerged portion of Outfall 001 once during the last year of the permit, to document the integrity and continued function of the outfall line and diffuser. If conditions allow for a photographic verification, it shall be included in the report. The inspection shall be conducted within the last 12 months before the listed expiration date of this permit. The report shall be submitted to the Department on or before November 1, 2002 as part of the permit renewal application.

## **S8. TREATMENT SYSTEM OPERATING PLAN**

Wastewater treatment systems shall be operated according to procedures and criteria described in an operating plan. This plan shall be updated on or before November 1, 1999 and maintained on site. The plan shall include, but is not limited to, the following:

1. A baseline operating condition which describes the operating parameters and procedures used to meet the effluent limitations of S1.
2. For reduced production rates below the baseline levels used to establish these limitations, the plan shall describe the operating procedures and conditions needed to maintain design treatment efficiency. The monitoring and reporting shall be described in the plan.
3. In the event of an upset due to plant maintenance activities, severe stormwater events, start ups or shut downs, or other causes, the plan shall describe the operating procedures and conditions employed to mitigate the upset. The monitoring and reporting shall be described in the plan.
4. A description of any regularly scheduled maintenance or repair activities at the facility which would affect the volume or character of the wastes discharged to the wastewater treatment system and a plan for monitoring and treating/controlling the discharge of maintenance-related materials (such as cleaners, degreasers, solvents, etc.).

This plan shall be updated to include requirements for any major modifications of the treatment system.

#### **S9. SPILL PLAN**

The Permittee shall update its existing Spill Control Plan by November 1, 1999. Thereafter, the Spill Plan shall be updated as needed, and at least annually. The plan and any supplements shall be followed throughout the term of the permit. All updates shall be submitted to Ecology, as well as a copy kept onsite.

The spill plan must include site spill control plans for the prevention, containment, and control of spills or unplanned discharges of: 1) oil and petroleum products, 2) materials, which when spilled, or otherwise released into the environment, are designated Dangerous (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070, or 3) other materials which may become pollutants or cause pollution upon reaching state's waters.

The spill control plan shall include the following:

- A description of the reporting system which will be used to alert responsible managers and legal authorities in the event of a spill.
- A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
- A list of all oil and chemicals used, processed, or stored at the facility which may be spilled into state waters.

For the purpose of meeting this requirement, plans and manuals required by 40 CFR Part 112, and contingency plans required by chapter 173-303 WAC may be submitted.

#### **S10. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)**

The definitions of terms used in this section are provided in the guidance document entitled *Stormwater Pollution Prevention Planning for Industrial Facilities*, which is published by the Department of Ecology.

##### **A. Plan Development Deadlines**

The Permittee shall develop, implement, and comply with a SWPPP in accordance with the following schedule:

1. By August 1, 1998, develop a SWPPP and retain it on-site.
2. By February 1, 1999, complete the implementation of *operational BMPs* and applicable *source control BMPs*, as required under this Special Condition, which do not require *capital improvements*.

3. By November 1, 1999, complete the implementation of BMPs requiring capital improvements.

The guidance for development of a SWPPP is available from the Permit Coordinator, Industrial Section, P.O. Box 47706, Olympia, Washington 98504-7706.

B. General Requirements

1. Submission, Retention and Availability:

The Permittee shall submit a copy of the SWPPP to the Department by August 1, 1998 for review and comment. The SWPPP and all of its modifications shall be signed in accordance with Special Condition S3.I. Retain the SWPPP on-site or within reasonable access to the site.

2. Modifications:

The Permittee shall modify the SWPPP whenever there is a change in design, construction, operation or maintenance which causes the SWPPP to be less effective in controlling the pollutants. Whenever the description of potential pollutant sources or the pollution prevention measures and controls identified in the SWPPP are inadequate, the SWPPP shall be modified, as appropriate, within two (2) weeks of such determination. The proposed modifications to the SWPPP shall be submitted to the Department at least 30 days in advance of implementing the proposed changes in the plan unless Ecology approves immediate implementation. The Permittee shall provide for implementation of any modifications to the SWPPP in a timely manner.

3. The Permittee may incorporate applicable portions of plans prepared for other purposes. Plans or portions of plans incorporated into a SWPPP become enforceable requirements of this permit.
4. The Permittee shall prepare the SWPPP in accordance with the guidance provided in the *Stormwater Pollution Prevention Planning for Industrial Facilities*. The plan shall contain the following elements:
  - a. Assessment and description of existing and potential pollutant sources,
  - b. A description of the operational BMPs,
  - c. A description of selected source-control BMPs,
  - d. When necessary, a description of the treatment BMPs, and
  - e. An implementation schedule.

C. Implementation

The Permittee shall conduct two inspections per year; one during the wet season (October 1 - April 30) and the other during the dry season (May 1 – Sept. 30).

1. The wet season inspection shall be conducted during a rainfall event by personnel named in the Stormwater Pollution Prevention Plan (SWPPP). The wet season inspection shall verify that the description of potential pollutant sources required under this permit is accurate; the site map required in the SWPPP has been updated and reflects current conditions; and the controls to reduce pollutants in stormwater discharges associated with industrial activity identified in the SWPPP are being implemented and are adequate. The wet-weather inspection shall include observations of the presence of floating materials, suspended solids, oil and grease, discolorations, turbidity, odor, etc. in the stormwater discharge(s).
2. The dry season inspection shall be conducted by personnel named in the SWPPP. The dry season inspection shall determine the presence of unpermitted non-stormwater discharges such as domestic wastewater, noncontact cooling water, or process wastewater (including *leachate*) to the *stormwater drainage system*.

D. Plan Evaluation

The Permittee shall evaluate if measures to reduce pollutant loadings identified in the SWPPP are adequate and properly implemented in accordance with the terms of the permit, or whether additional controls are needed. A summary record of inspections and any incidents of noncompliance shall be maintained. Also, the Permittee shall certify that the facility is in compliance with the plan and this permit, in accordance with Condition S3.I.

## GENERAL CONDITIONS

### G1. DISCHARGE VIOLATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any pollutant more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

### G2. PROPER OPERATION AND MAINTENANCE

The Permittee shall at all times properly operate and maintain all facilities and systems of collection, treatment, and control (and related appurtenances) which are installed or used by the Permittee for pollution control.

**G3. REDUCED PRODUCTION FOR COMPLIANCE**

The Permittee, in order to maintain compliance with its permit, shall control production and/or all discharges upon reduction, loss, failure, or bypass of the treatment facility until the facility is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

**G4. NONCOMPLIANCE NOTIFICATION**

If for any reason, the Permittee does not comply with, or will be unable to comply with, any of the discharge limitations or other conditions specified in the permit, the Permittee shall, at a minimum, provide the Department with the following information:

- A. A description of the nature and cause of noncompliance, including the quantity and quality of any unauthorized waste discharges;
- B. The period of noncompliance, including exact dates and times and/or the anticipated time when the Permittee will return to compliance; and
- C. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the noncompliance.

In addition, the Permittee shall take immediate action to stop, contain, and clean up any unauthorized discharges and take all reasonable steps to minimize any adverse impacts to waters of the state and correct the problem. The Permittee shall notify the Department by telephone so that an investigation can be made to evaluate any resulting impacts and the corrective actions taken to determine if additional action should be taken.

In the case of any discharge subject to any applicable toxic pollutant effluent standard under Section 307(a) of the Clean Water Act, or which could constitute a threat to human health, welfare, or the environment, 40 CFR Part 122 requires that the information specified in Sections G4.A., G4.B., and G4.C., above, shall be provided not later than 24 hours from the time the Permittee becomes aware of the circumstances. If this information is provided orally, a written submission covering these points shall be provided within five days of the time the Permittee becomes aware of the circumstances, unless the Department waives or extends this requirement on a case-by-case basis.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.

**G5. BYPASS PROHIBITED**

The intentional bypass of wastes from all or any portion of a treatment works is prohibited unless the following four conditions are met:

- A. Bypass is: (1) unavoidable to prevent loss of life, personal injury, or severe property damage; or (2) necessary to perform construction or maintenance-related activities essential to meet the requirements of the Clean Water Act and authorized by administrative order;
- B. There are no feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, maintenance during normal periods of equipment down time, or temporary reduction or termination of production;
- C. The Permittee submits notice of an unanticipated bypass to the Department in accordance with Condition G4. Where the Permittee knows or should have known in advance of the need for a bypass, this prior notification shall be submitted for approval to the Department, if possible, at least 30 days before the date of bypass (or longer if specified in the special conditions);
- D. The bypass is allowed under conditions determined to be necessary by the Department to minimize any adverse effects. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible.

"Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

After consideration of the factors above and the adverse effects of the proposed bypass, the Department will approve or deny the request. Approval of a request to bypass will be by administrative order under RCW 90.48.120.

#### **G6. RIGHT OF ENTRY**

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

- A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit;
- B. To have access to and copy at reasonable times any records that must be kept under the terms of the permit;
- C. To inspect at reasonable times any monitoring equipment or method of monitoring required in the permit;
- D. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities; and
- E. To sample at reasonable times any discharge of pollutants.

**G7. PERMIT MODIFICATIONS**

The Permittee shall submit a new application or supplement to the previous application where facility expansions, production increases, or process modifications will (1) result in new or substantially increased discharges of pollutants or a change in the nature of the discharge of pollutants, or (2) violate the terms and conditions of this permit.

**G8. PERMIT MODIFIED OR REVOKED**

After notice and opportunity for public hearing, this permit may be modified, terminated, or revoked during its term for cause including, but not limited to, the following:

- A. Violation of any terms or conditions of the permit;
- B. Failure of the Permittee to disclose fully all relevant facts or misrepresentations of any relevant facts by the Permittee during the permit issuance process;
- C. A change in any condition that requires either a temporary or a permanent reduction or elimination of any discharge controlled by the permit;
- D. Information indicating that the permitted discharge poses a threat to human health or welfare;
- E. A change in ownership or control of the source; or
- F. Other causes listed in 40 CFR 122.62 and 122.64.

Permit modification, revocation and reissuance, or termination may be initiated by the Department or requested by any interested person.

**G9. REPORTING A CAUSE FOR MODIFICATION**

A Permittee who knows or has reason to believe that any activity has occurred or will occur which would constitute cause for modification or revocation and reissuance under Condition G8. or 40 CFR 122.62 must report such plans, or such information, to the Department so that a decision can be made on whether action to modify or revoke and reissue a permit will be required. The Department may then require submission of a new application. Submission of such application does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

**G10. TOXIC POLLUTANTS**

If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation upon such pollutant in the permit, the Department shall institute proceedings to modify or revoke and reissue the permit to conform to the new toxic effluent standard or prohibition.

**G11. PLAN REVIEW REQUIRED**

Prior to constructing or modifying any wastewater control facilities, detailed plans shall be submitted to the Department for approval in accordance with chapter 173-240 WAC. Facilities shall be constructed and operated in accordance with the approved plan.

**G12. OTHER REQUIREMENTS OF 40 CFR**

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

**G13. COMPLIANCE WITH OTHER LAWS AND STATUTES**

Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

**G14. ADDITIONAL MONITORING**

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

**G15. REVOCATION FOR NONPAYMENT OF FEES**

The Department may revoke this permit if the permit fees established under chapter 173-224 WAC are not paid.

**G16. REMOVED SUBSTANCES**

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the final effluent stream for discharge to state waters.

**G17. DUTY TO REAPPLY**

The Permittee must reapply, for permit renewal, at least 180 days prior to the specified expiration date of this permit.